This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1   Claim 1 (currently amended): A method for identifying a
2   momentary acoustic scene, said method including
3   - an extraction, during an extraction phase, of
4   characteristics from an acoustic signal captured by
5   at least one microphone (2a, 2b), wherein at least
6   auditory characteristics are extracted and
7   - an identification, during an identification phase, of
8   the momentary acoustic scene on the basis of the
9   extracted characteristics by mapping the extracted
10   characteristics to specific individual sound sources
11   of a plurality of different sound sources and
12   - selecting and executing a process for analyzing and
13   modifying an acoustic signal, said process taken
14   from a plurality of available processes based on the
15   identified momentary acoustic scene.

1   Claim 2 (previously presented): Method as in claim 1,
2   wherein, for the identification of the characteristic features
3   during the extraction phase, Auditory Scene Analysis (ASA)
4   techniques are employed.

1   Claim 3 (previously presented): Method as in claim 1,
2   wherein, during the identification phase, Hidden Markov Model
3   (HMM) techniques are employed for the identification of the
4   momentary acoustic scene.

1   Claim 4 (previously presented): Method as in claim 1,
2   wherein at least one of the following auditory characteristics
3   are identified during the extraction of said characteristic
4   features: loudness, spectral pattern, harmonic structure,

5   common build-up and decay processes, coherent amplitude

6   modulations, coherent frequency modulations, coherent

7   frequency transitions and binaural effects.

1   Claim 5 (previously presented): Method as in claim 1,

2   wherein at least one non-auditory characteristic is identified

3   in addition to the auditory characteristics.

1   Claim 6 (previously presented): Method as claim 1,

2   wherein the auditory characteristics are grouped along Gestalt

3   theory principles.

1   Claim 7 (previously presented): Method as in claim 6,

2   wherein the extraction of characteristics and/or the grouping

3   of the characteristics are performed either in context-free or

4   in context-sensitive fashion, and further including the step

5   of taking into account information relative to a signal

6   content to thereby provide an adaptation to the acoustic

7   scene.

1   Claim 8 (previously presented): Method as in claim 1,

2   wherein, during the identification phase, data are accessed

3   which were acquired in an off-line training phase.

1   Claims 9-18 (canceled).

1   Claim 19 (currently amended): A method for identifying

2   and selecting an appropriate process for analyzing an acoustic

3   signal, said method including

4   - an extraction, during an extraction phase, of

5   characteristics from said acoustic signal, wherein

6   at least auditory characteristics are extracted ;

7   - an identification, during an identification phase, of a

8   momentary acoustic scene on the basis of the

9   extracted characteristics by mapping the extracted

10   characteristics to specific individual sound sources

11   of a plurality of different sound sources;

12 - selecting a process for analyzing the acoustic signal

13   based on the identified momentary acoustic scene,

14   wherein said suitable process is chosen from a

15   plurality of available processes for analyzing the

16   acoustic signal; and

17 - executing said selected process to generate and output

18   a processed acoustic signal.

1   Claim 20 (previously presented): The process of claim 19,

2   wherein said extraction includes the step of analyzing the

3   acoustic structure of the acoustic signal for identifying

4   tonal signals in acoustical signals generated by speech and

5   tonal signals generated by music.

1   Claim 21 (previously presented): The process of claim 19,

2   wherein said extraction applies the principles of gestalt

3   analysis for acoustical signals generated by speech and tonal

4   signals generated by music.

1   Claim 22 (previously presented): The process of claim 21,

2   wherein said gestalt analysis includes examining a qualitative

3   property chosen from the group consisting of continuity,

4   proximity, similarity, common density, unit, and good

5   constancy.

1   Claim 23 (previously presented): The process of claim 19,

2   wherein said executing said selected suitable process includes

3   the step of processing said acoustic signal to generate a

4   hearing signal for improving the hearing ability of a user.

1   Claim 24 (previously presented): The process of claim 19

2 further including the step of generating an audio signal from

3 said processed acoustic signal for transmission to a user.

1   Claim 25 (currently amended): A method for identifying

2 and selecting an appropriate process for analyzing an acoustic

3 signal, said method including

4   - an extraction, during an extraction phase, of

5   characteristics from said acoustic signal including

6   the step of analyzing the acoustic structure of the

7   acoustic signal for identifying tonal signals in

8   acoustical signals generated by speech and tonal

9   signals generated by music, wherein at least

10   auditory characteristics are extracted ; and

11   - an identification, during an identification phase, of a

12   momentary acoustic scene on the basis of the

13   extracted characteristics by mapping the extracted

14   characteristics to each of a plurality of specific

15   individual sound sources, and further wherein said

16   identification includes the use of hidden markov

17   models; and

18   - selecting a process for analyzing the acoustic signal

19   based on the identified momentary acoustic scene,

20   wherein said suitable process is chosen from a

21   plurality of available processes, said process for

22   improving the hearing ability of a user;

23   - executing said selected process, said executing

24   including the step of processing said acoustic

25   signal to generate a processed audio signal; and

26   - generating an audio signal from said processed acoustic

27   signal for transmission to said user.

1   Claim 26 (previously presented): A method for identifying

2 and selecting an appropriate process for analyzing an acoustic

3 signal, said method including:

4   - an extraction of at least auditory-based characteristic
5   features from an acoustic signal, wherein said
6   auditory characteristics include one or more of:
7   volume, spectral pattern, harmonic structure, common
8   build-up and decay times, coherent amplitude
9   modulations, coherent frequency modulations,
10   coherent frequency transitions, and binaural
11   effects; and
12   - an identification of the momentary acoustic scene on
13   the basis of the characteristics not limited to
14   speech characteristics; and
15   - automatically selecting a hearing process for execution
16   by a hearing device from a plurality of available
17   processes based on the identified momentary acoustic
18   scene.

1   Claim 27 (previously presented): The method of claim 26,
2   wherein said identification includes at least a determination
3   of whether the momentary acoustic scene includes speech,
4   music, or some other auditory activity.

1   Claim 28 (previously presented): The method of claim 26,
2   further comprising a step of grouping the characteristic
3   features according to: continuity, proximity, similarity,
4   common density, unit, and good constancy; wherein said
5   grouping supports the identification of the momentary acoustic
6   scene.

1   Claim 29 (previously presented): A method for identifying
2   a momentary acoustic scene for a hearing device, said method
3   including
4   - an extraction, during an extraction phase, of
5   characteristics from an acoustic signal captured by

6   at least one microphone, wherein at least auditory

7   characteristics are extracted and

8   - an identification, during an identification phase, of

9   the momentary acoustic scene on the basis of the

10   extracted characteristics; and

11   - selecting and executing an <u>audio signal analyzing</u>

12   process ~~for execution in a hearing device,~~ from a

13   plurality of available <u>audio signal analyzing</u>

14   processes based on the identified momentary acoustic

15   scene, <u>said audio signal analyzing process for</u>

16   <u>execution in a hearing device for improving the</u>

17   <u>hearing of a user</u>.

1   Claim 30 (previously presented): The method of claim 29,

2 further comprising a step of grouping the characteristic

3 features according to: continuity, proximity, similarity,

4 common density, unit, and good constancy; wherein said

5 grouping supports the identification of the momentary acoustic

6 scene.

1   Claim 31 (previously presented): The process of claim 29,

2 wherein said execution generates a processed acoustic signal,

3 said process further including the step of said hearing device

4 generating an audio signal from said processed acoustic signal

5 for transmission to a user to aid the hearing of the user.